Amendments to the Claims

(Currently amended)

1. A real time data transmission system for uplink and downlink transmissions between a mobile station and a destination station, the mobile station in the uplink transmission adding to a ~~the~~ payload data stream by generating a header containing its own identity and a ~~the~~ destination identity to accompany the payload in the data stream, a radio network controller upon receiving the data stream adding to the header a tunnel identity obtained from a call control system to identify the data stream and then directing the data stream directly to a media gateway, the media gateway in the downlink transmission receiving a data stream including a header containing the mobile station identity and a ~~the~~ mobile station input port identity obtained from a ~~the~~ serving general packet radio system support node (SGSN), the media gateway acting to replace both the mobile station identity and the input port[,] identity in the header with an ~~the~~ address of the radio network controller, the input port identity and the ~~a~~ tunnel identity for identifying the data stream, all obtained from the call control system and then directing the data stream directly to the radio network controller, the radio network controller ~~and~~ acting to replace the radio network controller ~~control~~ address in the header with the mobile station identity address and input port identity both obtained from the call control system via the SGSN and responding to the tunnel identity data received to identify the data stream and then to direct the data stream to a corresponding radio bearer linking it to the mobile station.

(Currently amended)

2. A real time data transmission method in a network including a mobile station, a radio network controller, a media gateway, a destination station and a call control system and in which a ~~the~~ passage of a data stream including a header section and payload section between the mobile station and the destination station is governed by ~~the~~ content of the header section, the method comprising, in the uplink transmission from the mobile station to the destination station, the step of adding to the header section of the data stream transmitted from the mobile station to the radio network controller, the identities of both stations, the step of adding to the header of the data stream passing through the radio network controller a tunnel identity obtained from the call control system, the step of forwarding the data stream from the radio network

controller to the media gateway, and in the down transmission from the destination station to the mobile station the step of adding to the header of the data stream passing from the destination station, the mobile station identity and port identity both obtained from the call control system, the step of replacing the mobile station identity and port identity in the header of the data stream with the radio network controller address, the input port identity and the tunnel identity for the data stream all obtained from the call control system, as the data stream passes through the media gateway, the step of forwarding the data stream to the radio network controller, the step of replacing the radio network control address and port identity in the header of the data stream with the mobile station ~~system~~ address and input port, both obtained from the call control system via an ~~the~~ SGSN as the data stream passes through the radio network controller, and the step of directing the data stream to the mobile station.

(Original)

3. A method according to Claim 2, including the step of causing the radio network controller to respond to the tunnel identity data received from the call control system to identify the data stream received and to direct it along a corresponding radio bearer linking it to the mobile station.

(Currently amended)

4. A real time data transmission method in a network including a mobile station, a radio network controller, a media gateway, a destination station and a call control system and in which a ~~the~~ passage of a data stream including a header section and payload section between the mobile station and the destination station is governed by ~~the~~ content of the header section, the method comprising the step of replacing at least some of the address related material in the header section as it passes from one location in the network to another location, with internal addresses related material whereby to reduce a ~~the~~ pathway of the data stream through the network and a ~~the~~ proportion of the size of the header section relative to the payload section.